

NAME _____

Wksht 4

1-8all

PERIOD _____ DATE _____

$$y = a(x - h)^2 + k$$

For each of the following quadratic functions

- a) State whether the graph opens upwards or downwards
- b) Give the y-intercept
- c) Find the axis of symmetry
- d) State whether the graph will have a minimum or maximum value
- e) Find the minimum or maximum value
- f) Give the vertex of the graph
- g) Graph the function
- h) Give the domain of the function
- i) Give the range of the function

1) $y = (x - 2)^2$

2) $y = (x + 4)^2$

3) $y = (x + 1)^2 - 2$

4) $y = -(x - 2)^2 + 4$

5) $y = (x + 5)^2 - 6$

6) $y = x^2 - 8x + 16$

7) $y = x^2 - 12x + 39$

8) $y = 4x^2 - 8x + 3$